

6. (Thrice Amended) The process for producing a hydrogenated ester according to claim 2, wherein the reaction temperature at the time of the hydrogenation reaction is in the range of 0°C to 200°C.

Sub E 12 Cont  
C2  
7. (Thrice Amended) The process for producing a hydrogenated ester according to claim 2, wherein that unsaturated group-containing ester represented by the general formula (1) is at least one compound selected from the group consisting of: allyl acetate, crotyl acetate, methallyl acetate, allyl propionate, crotyl propionate, methallyl propionate, vinyl acetate, vinyl propionate, 1,3-butadienyl acetate, and 1,3-butadienyl propionate.

8. (Thrice Amended) The process for producing a hydrogenated ester according to claim 2, wherein the hydrogenating catalyst comprises at least one element selected from the group consisting of Group VIII elements, Group IX elements or Group X elements in the periodic table.

9. (Thrice Amended) The process for producing a hydrogenated ester according to claim 30, wherein the hydrogenation reaction is conducted by a liquid-phase reaction by use of a fixed bed-type reactor.

Sub E 12 Cont  
C3  
10. (Twice Amended) A process for producing a hydrogenated ester by hydrogenating an allyl-type ester represented by a general formula (1) (n=1) by using a hydrogenating catalyst so as to produce the corresponding hydrogenated ester corresponding to the allyl-type ester, wherein the concentration of a carboxylic acid in a raw material containing the allyl-type ester represented by the general formula (1) is 1 wt. % or less.

11. (Twice Amended) The process for producing a hydrogenated ester according to claim 10, wherein the hydrogenating catalyst comprises at least one species selected from the

Sub E 12 Cont  
C 3  
concl'd

group consisting of compounds of Group VIII elements, Group IX elements or Group X elements in the periodic table.

12. (Twice Amended) The process for producing a hydrogenated ester according to claim 11, wherein the hydrogenating catalyst comprises at least one species selected from the group consisting of compounds of palladium, rhodium or ruthenium.

C 4  
Sub E 12 Cont

13. (Thrice Amended) The process for producing a hydrogenated ester according to claim 10, wherein the allyl-type ester represented by the general formula (1) is at least one species of allyl-type ester selected from the group consisting of allyl acetate, crotyl acetate, methallyl acetate, allyl propionate, crotyl propionate, and methallyl propionate.

24. (Amended) The process for producing a hydrogenated ester according to claim 31, wherein the hydrogenation is carried out at a reaction temperature in the range of 0° to 200°C.

Sub E 12 Cont

25. (Amended) The process for producing a hydrogenated ester according to claims 33, wherein the hydrogenation is carried out at a reaction temperature in the range of 0° to 200° C.

C 5

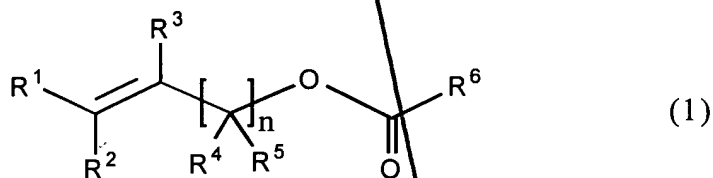
26. (Amended) The process for producing a hydrogenated ester according to claim 31, wherein the unsaturated group-containing ester as a raw material is diluted with an inert solvent and the resultant diluted liquid is used as the raw material-containing a liquid to be hydrogenated.

27. (Amended) The process for producing a hydrogenated ester according to claim 33, wherein the unsaturated group-containing ester as a raw material is diluted with an inert solvent and the resultant diluted liquid is used as the raw material-containing liquid to be hydrogenated.

28. (Amended) The process for producing a hydrogenated ester according to claim 25, wherein the inert solvent is a hydrogenated ester corresponding to the unsaturated group-containing ester as a raw material.

29. (Amended) The process for producing a hydrogenated ester according to claim 24, wherein the inert solvent is a hydrogenated ester corresponding to the unsaturated group-containing ester as a raw material.

30. (Amended) A process for producing a hydrogenated ester by hydrogenating an unsaturated group-containing ester represented by the following general formula (1) in the presence of a hydrogenating catalyst so as to produce the corresponding hydrogenated ester corresponding to the unsaturated group-containing ester



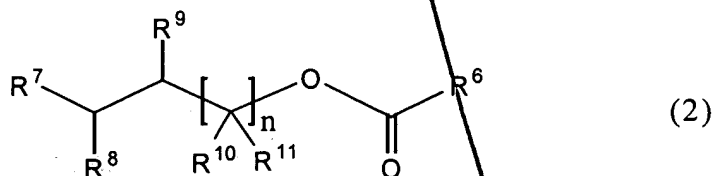
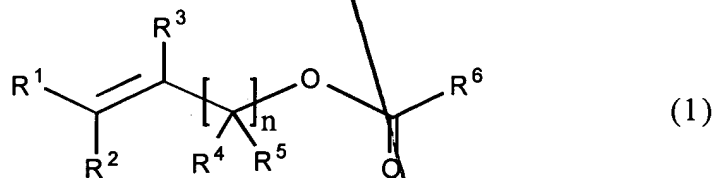
wherein  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$  denote an arbitrary alkyl group containing 1-10 carbon atoms, an arbitrary alkenyl group containing 2 - 10 carbon atoms, or a hydrogen atom and may be the same as or different from each other; the alkyl group and alkenyl group may be either straight-chain or branched;  $R^6$  denotes an arbitrary alkyl group which contains 1 - 10 carbon atoms and may be either straight-chain or branched; and  $n$  is 0 or 1, comprising

providing an unsaturated group-containing ester represented by the general formula (1), wherein the concentration of the unsaturated group-containing ester represented by general formula (1) at the initial time of the hydrogenation reaction thereof is in the range of 1 wt % -50

wt % based on the entirety of the raw material liquid containing the unsaturated group-containing ester; and

reacting the unsaturated group containing ester with hydrogen while diluting said unsaturated group-containing ester with an inert solvent to effectuate a hydrogenation reaction, wherein the inert solvent is the corresponding hydrogenated ester.

31. (Amended) A process for producing a hydrogenated ester, wherein an unsaturated group-containing ester represented by the general formula (1) is hydrogenated by using a hydrogenating catalyst which contains at least one metal selected from the group consisting of Group VIII elements, Group IX elements, and Group X elements in the periodic table, and is to be used for hydrogenating an unsaturated group-containing ester represented by the following formula (1) to thereby produce a hydrogenated ester represented by the following formula (2), wherein the catalyst has an acidity of  $1.0 \times 10^{-1}$  mol/g or less:



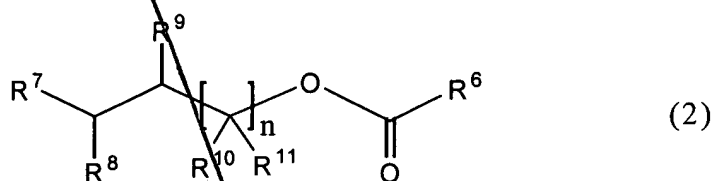
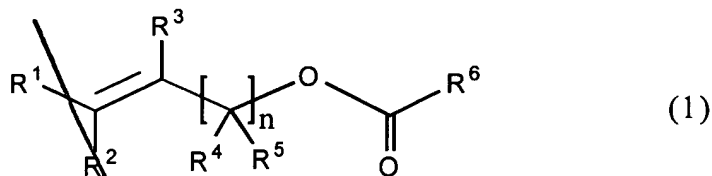
wherein n represents 0 or 1; R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> denote an arbitrary alkyl group containing 1-10 carbon atoms, an arbitrary alkenyl group containing 2 - 10 carbon atoms, or a hydrogen atom and may be the same as or different from each other; the alkyl group and alkenyl group may be either straight-chain or branched; R<sup>6</sup> represents a C<sub>1</sub>-C<sub>10</sub> alkyl group; and each of R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, and R<sup>11</sup> represents a C<sub>1</sub>-C<sub>10</sub> alkyl group, a C<sub>2</sub>-C<sub>10</sub> alkenyl group, or a hydrogen atom independently to each other.

Sub 6/12 Cont

32. (Amended) The process for producing a hydrogenated ester according to claim 31, wherein the hydrogenating catalyst selected from at least one metal selected from the group consisting of Group VIII elements, Group IX elements, and Group X elements in the periodic table is at least one of the species selected from the group consisting of palladium, ruthenium and rhodium.

C5 Contd

33. (Amended) A process for producing a hydrogenated ester, wherein at least one of the species of an unsaturated group-containing ester selected from the group consisting of allyl acetate, crotyl acetate, methallyl acetate, allyl propionate, crotyl propionate, methallyl propionate, vinyl acetate, 1,3-butadienyl acetate, 1-methyl-1-propenyl acetate, vinyl propionate, 1,3-butadienyl propionate, and 1-methyl-1-propenyl propionate is hydrogenated by using a hydrogenating catalyst which contains at least one metal selected from the group consisting of Group VIII elements, Group IX elements, and Group X elements in the periodic table, and is to be used for hydrogenating an unsaturated group-containing ester represented by the following formula (1) to thereby produce a hydrogenated ester represented by the following formula (2), wherein the catalyst has an acidity of  $1.0 \times 10^{-1}$  mol/g or less:



wherein n represents 0 or 1; R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> denote an arbitrary alkyl group containing 1-10 carbon atoms, an arbitrary alkenyl group containing 2 - 10 carbon atoms, or a hydrogen atom and may be the same as or different from each other; the alkyl group and alkenyl group may be either straight-chain or branched; R<sup>6</sup> represents a C<sub>1</sub>-C<sub>10</sub> alkyl group; and each of R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>10</sup>, and R<sup>11</sup> represents a C<sub>1</sub>-C<sub>10</sub> alkyl group, a C<sub>2</sub>-C<sub>10</sub> alkenyl group, or a hydrogen atom independently to each other.

34. (Amended) The process for producing a hydrogenated ester according to claim 33, wherein the hydrogenating catalyst selected from at least one metal selected from the group consisting of Group VIII elements, Group IX elements, and Group X elements in the periodic table is at least one of the species selected from the group consisting of palladium, ruthenium and rhodium.